UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,072	01/21/2004	Robert F. Sheppard	200901410-1	3704
	7590 03/30/201 CKARD COMPANY	EXAMINER		
Intellectual Property Administration			KARDOS, NEIL R	
3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528		ART UNIT	PAPER NUMBER	
		3623		
			NOTIFICATION DATE	DELIVERY MODE
			03/30/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM ipa.mail@hp.com laura.m.clark@hp.com

	Application No.	Applicant(s)		
	10/763,072	SHEPPARD, ROBERT F.		
Office Action Summary	Examiner	Art Unit		
	Neil R. Kardos	3623		
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address		
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statt Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MOI ute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 16 2a) This action is FINAL . 2b) The 3) Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal mat	•		
Disposition of Claims				
4) ☐ Claim(s) 1-14 and 16-30 is/are pending in th 4a) Of the above claim(s) is/are withdensity 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-14 and 16-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.			
Application Papers				
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the left of the specific sheet and the specific	ccepted or b) objected to ne drawing(s) be held in abeya ection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) ☑ Notice of References Cited (PTO-892)	4) 🔲 Interview	Summary (PTO-413)		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	s)/Mail Date nformal Patent Application		

This is a **FINAL** Office Action on the merits in response to communications filed on December 16, 2009. Currently, claims 1-14 and 16-30 are pending and have been examined.

Response to Amendment

Applicant's amendments to the claims are sufficient to overcome the § 101 and § 112 rejections set forth in the previous office action. A new rejection of claims 17-30 under § 101 appears below, which is necessitated by applicant's amendments to claim 17.

Response to Arguments

Applicant's arguments filed on December 16, 2009 have been fully considered but they are not persuasive. Applicant argues the following:

- (A) The cited references do not disclose "associating items of IT infrastructure with roles within the enterprise such that each role within the enterprise is associated with one or more predetermined items of IT infrastructure." (See Remarks, page 12).
- (B) The cited references do not disclose "assigning roles to one or more employees of the enterprise such that each of the one or more employees is associated with one or more roles and is assigned the one or more predetermined items of IT infrastructure associated with each of these one or more roles." (See Remarks, page 12).

- (C) The cited references do not disclose "automatically modeling a change in the items of IT infrastructure assigned to one or more impacted employees of the enterprise." (See Remarks, pages 12-13).
- (D) The cited references do not disclose "automatically initiating deployment of the change in the items of IT infrastructure assigned to the one or more impacted employees." (See Remarks, pages 13-14).

Applicant's arguments will now be addressed in turn.

(A) The cited references do not disclose "associating items of IT infrastructure with roles within the enterprise such that each role within the enterprise is associated with one or more predetermined items of IT infrastructure." (See Remarks, page 12).

Regarding argument (A), Examiner respectfully disagrees. Ann discloses "roles and responsibilities" that are associated with "user groups." "Application software" supports the "user groups." (See figure 5: items 314, 330, and 334; paragraphs 33 and 46). Thus, Ann discloses IT infrastructure ("application software") that is associated with roles within the enterprise ("role and responsibilities" via "user groups").

(B) The cited references do not disclose "assigning roles to one or more employees of the enterprise such that each of the one or more employees is associated with one or more roles and is assigned the one or more predetermined items of IT

Application/Control Number: 10/763,072

Art Unit: 3623

infrastructure associated with each of these one or more roles." (See Remarks, page 12).

Page 4

Regarding argument (B), Examiner respectfully disagrees. Ann discloses "roles and responsibilities" that are assigned to employees ("user groups"). (See figure 5: items 314 and 334). Furthermore, Ann discloses that the roles and responsibilities are specifically assigned to members of the organization (see paragraph 33). Thus, Ann discloses assigning roles to employees.

(C) The cited references do not disclose "automatically modeling a change in the items of IT infrastructure assigned to one or more impacted employees of the enterprise." (See Remarks, pages 12-13).

Regarding argument (C), Examiner respectfully disagrees. The purpose of Ann's framework is to manage the effects of changes in the information technology environment on the operation of an enterprise. (See paragraphs 6, 9, and 14). These changes are automatically modeled by governance rules. (See paragraph 6: "the impact of changes in one component [drives] the other component"; paragraph 46: "Governance manages change and evolution in the current IT environment and other components of the system."; see also paragraph 47, disclosing an example of modeling a change in IT architecture). Thus, Ann discloses the claimed limitation.

Application/Control Number: 10/763,072

Art Unit: 3623

(D) The cited references do not disclose "automatically initiating deployment of the change in the items of IT infrastructure assigned to the one or more impacted employees." (See Remarks, pages 13-14).

Page 5

Regarding argument (D), Examiner respectfully disagrees. First, Ann discloses the claimed limitation. Ann discloses an "event" that automatically triggers the use of IT infrastructure. (See paragraph 43). Ann also discloses an example of deploying a change in IT infrastructure by putting a company catalog on the Internet and becoming an "e-tailer." This deployment changes the model of Ann. (See paragraph 47). Thus, Ann discloses this limitation. Furthermore, Northcutt discloses the claimed limitation. Northcutt discloses deploying a change to IT infrastructure based on a service request. (See paragraphs 7, 8, 12, 47, 48, 63, and 74).

Finally, Examiner notes that the rejection was made under § 103. The proper analysis under § 103 is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. *See* MPEP 2141(III). Furthermore, prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. *See id.* One of ordinary skill in the art would have understood, and it was well-known in the art at the time the invention was made, to automate processes. It would have been obvious to one of ordinary skill in the art at the time the invention was made to automate the deployment of the IT changes of Ann and Northcutt (assuming, arguendo, that they are not already deployed automatically). One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies gained by automating processes.

Application/Control Number: 10/763,072 Page 6

Art Unit: 3623

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 17: Claim 17 recites a computer-readable medium storing instructions. Given the broadest reasonable interpretation, this claim could be directed to transmission signals or carrier waves that are not eligible for patent protection. (See David J. Kappos, *Subject Matter Eligibility of Computer Readable Media*, 1351 OG 212 (February 23, 2010), available at http://www.uspto.gov/web/offices/com/sol/og/2010/week08/TOC.htm#ref20). Claims reciting transmission signals or carrier waves per se are not processes, machines, manufactures or compositions of matter; thus, they do not qualify as patent-eligible subject matter under § 101. See MPEP 2106; *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007).

This rejection can be overcome by amending the claim to recite a "non-transitory computer-readable medium."

<u>Claims 18-30</u>: The dependent claims are rejected for failing to remedy the deficiencies of the claims from which they depend.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/763,072 Page 7

Art Unit: 3623

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-14 and 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ann (US 2002/0198727) in view of Northcutt (US 2003/0126001).

<u>Claim 1</u>: Ann discloses a system for managing information technology (IT) infrastructure of an enterprise, the system comprising a centralized logistics and management (CLAM) tool operable to:

in a capture phase:

- capture and store IT infrastructure information regarding the IT infrastructure of the enterprise (see figure 5: items 74, 342; paragraph 29; paragraph 35);
- define a plurality of roles within the enterprise, each role specifying a particular job function within the enterprise (see figure 5: item 314; paragraph 33);
- associate items of IT infrastructure with roles within the enterprise such that each role within the enterprise is associated with one or more predetermined items of IT infrastructure (see figure 5: items 314, 334, and 330; paragraphs 41 and 43-44; paragraph 46); and
- assign roles to one or more employees of the enterprise such that each of the one or more employees is associated with one or more roles is assigned the one or more predetermined items of IT infrastructure associated with each of these one or more roles (see figure 5: items 314, 334, and 330; paragraphs 33, 46);
- in a modeling phase, automatically model a change in the IT infrastructure for one or more impacts employees of the enterprise (see paragraph 14, disclosing impact

Application/Control Number: 10/763,072

Art Unit: 3623

of changes in components; paragraph 47, disclosing modeling changes in IT infrastructure);

Page 8

Ann does not explicitly disclose automatically initiating deployment of one or more IT infrastructure assets for the one or more impacted employees by organizing delivery of the one or more IT infrastructure assets to the one or more impacted employees to implement the change modeled in the modeling phase. However, Ann does suggest this limitation (see paragraph 47, disclosing modeling changes to the enterprise that include changes to the IT infrastructure such as application software; paragraph 43, disclosing events causing IT infrastructure to be implemented). Northcutt explicitly discloses this limitation (see paragraph 47, disclosing implementing IT assets in response to service or project requests; paragraph 63, disclosing requests for service for information technology support; paragraph 74, disclosing providing the IT service; paragraphs 7-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to deploy the changes of Ann as taught by Northcutt. This combination of known elements retains the functionality of the separate elements and produces a result that would be predictable to one of ordinary skill in the art; that is, the implementation of desired organizational changes.

<u>Claim 2</u>: Ann discloses wherein the IT infrastructure of the enterprise comprises one or more computer-related facilities, services, and installations used for operations of the enterprise, comprising one or more of computer hardware and computer software (see figure 5: item 74).

Claim 3: Ann discloses wherein the capture phase comprises an existing IT assets area for capturing an existing view of IT infrastructure assets of the enterprise, the existing IT assets area comprising one or more of: asset profiles for IT infrastructure assets of the enterprise (see figure 5: item 342), employee profiles for employees of the enterprise (see figure 5: item 334), location profiles for locations associated with the enterprise (see figure 5: item 320), and division profiles for divisions of the enterprise (see figure 5: item 312).

Claim 4: Ann discloses wherein the CLAM tool is further operable to, if a role assigned to a particular employee is changed to a different role, change the one or more items of IT infrastructure associated with the particular employee to reflect the different role (see paragraph 33, disclosing roles; paragraphs 46-47, disclosing modeling changes; paragraphs 13-14, disclosing change impacts).

Claim 5: Ann discloses the tool further operable to assign one or more additional items of IT infrastructure to the particular employee such that the particular employee receives the one or more additional items of IT infrastructure in addition to the one or more predetermined items of IT infrastructure associated with each of the one or more roles assigned to the particular employee (see paragraph 48, disclosing the flexibility of the model; see also Northcutt, paragraphs 65-67, disclosing assigned additional IT infrastructure to employees).

Claim 6: Ann discloses wherein the change in the IT infrastructure of the enterprise comprises a technology refresh for one of: a particular employee of the enterprise (see paragraph

33; figure 5: item 314), a particular group of employees of the enterprise (see paragraph 33; figure 5: item 334), all employees of a division of the enterprise (see figure 5: item 312; paragraph 42), all employees of the enterprise (see paragraph 47).

<u>Claim 7</u>: Ann discloses wherein the change in the IT infrastructure of the enterprise comprises a technology refresh for one or more of: a particular workspace of the enterprise, a work area comprising a plurality of workspaces, a building of the enterprise, and all sites associated of the enterprise (see figure 5: item 320; paragraphs 44 and 46).

<u>Claim 8</u>: Ann discloses wherein the change in the IT infrastructure comprises moving one or more employees between: particular workspaces of the enterprise, work areas of the enterprise, or buildings of the enterprise (see paragraph 46; figure 5: items 312 and 320; organization units are associated with locations and modeled to see the effects of changes).

<u>Claim 9</u>: Ann discloses wherein the modeling phase comprises modeling a change to the IT infrastructure of the enterprise according to one or more of: network topology considerations, and one or more business rules associated with the enterprise (see paragraph 32, disclosing governance rules; paragraphs 46-47).

<u>Claim 10</u>: Ann does not explicitly disclose wherein the deployment phase comprises user acceptance testing to determine whether one or more deployed changes in the IT infrastructure of the enterprise was successful and, if the changes were not successful, initiating a process to

Page 11

correct problems. Northcutt discloses this limitation (see paragraph 47, disclosing user acceptance testing; paragraph 74, disclosing user testing). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to test the changes proposed by Ann

as taught by Northcutt. One of ordinary skill in the art would have been motivated to do so for

the benefits associated with testing (e.g. ensuring that fixes work or implementations are

successful).

<u>Claim 11</u>: Ann does not explicitly disclose the limitations of this claim. Northcutt discloses:

• receiving a change request, the change request comprising one or more of a

request for a change in the IT infrastructure or a request to resolve a problem

associated with the IT infrastructure (see paragraphs 46-48, disclosing project

requests and service requests);

• automatically creating an incident for the change request, the incident enabling

the change request to be tracked and monitored (see paragraph 78, disclosing

automatically creating a request for service number);

• determining whether to approve the change request (see paragraph 49, disclose

approvals and exceptions; paragraphs 64-65, disclosing approvals);

• if the change request is approved:

o automatically applying one or more business rules to the change request

(see paragraphs 64-65, disclosing automatically change the request type;

also disclosing routing the service request to the appropriate party);

o automatically initiating deployment of IT infrastructure assets for fulfilling the change request (see paragraph 47, disclosing implementing IT assets in response to service or project requests; paragraph 63, disclosing requests for service for information technology support; paragraph 74, disclosing providing the IT service; paragraphs 7-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the change tracking system disclosed by Ann when managing the change requests of Northcutt. One of ordinary skill in the art would have been motivated to do so for the benefit of more accurate information based on the system of Ann (which provides a change impact analysis), to be used in the decision-making process.

Claim 12: Ann does not explicitly disclose the limitations of this claim. Northcutt discloses a scheduling procedure for scheduling deployment of the IT infrastructure assets for fulfilling the change request, the scheduling procedure comprising creating one or more milestones for delivery of the IT infrastructure assets for fulfilling the change request (see paragraph 60, disclosing a due date; paragraph 64, disclosing a critical date). Ann and Northcutt are combinable for the reasons discussed above with respect to claim 11.

<u>Claim 13</u>: Ann and Northcutt do not explicitly disclose that if a particular milestone is not met, notifying one or more appropriate individuals that the milestone was not met. Examiner takes Official Notice that it was well-known in the art at the time the invention was made to alert responsible parties when deadlines are not met. It would have been obvious to one of ordinary

skill in the art at the time the invention was made to combine these well-known alerts with the deadlines of Northcutt. This combination of known elements retains the functionality of the

Page 13

separate elements and produces a result that would be predictable to one of ordinary skill in the

art (e.g. sending an alert when a deadline has passed).

Claim 14: Ann does not explicitly disclose the limitations of this claim. Northcutt

discloses one or more follow-up procedures for determining whether the IT infrastructure assets

for fulfilling the change request were properly deployed and, if the IT infrastructure assets were

not properly deployed, creating a new incident for resolving problems associated with the

deployment of the IT infrastructure assets (see paragraph 47, disclosing user testing and

acceptance as well as sign-off). Ann and Northcutt are combinable for the reasons discussed

above with respect to claim 11.

Claim 16: Ann discloses a database operable to store the IT infrastructure information

regarding the IT infrastructure of the enterprise (see paragraph 29, disclosing storing the

information in a database).

Claims 17-30: Claims 17-30 are substantially similar to claims 1-15 and are rejected

under similar rationale.

Conclusion

Page 14

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ali Bahrami, et al., "Enterprise Architecture for Business Process Simulation,"
 Proceedings of the 1998 Winter Simulation Conference, pp. 1409-1413 (1998).
- Melody A. Rood, "Enterprise Architecture: Definition, Content, and Utility,"
 IEEE, pp. 106-111 (1994).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

Application/Control Number: 10/763,072 Page 15

Art Unit: 3623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neil R. Kardos Examiner Art Unit 3623

/Neil R. Kardos/ Examiner, Art Unit 3623

/Beth V. Boswell/ Supervisory Patent Examiner, Art Unit 3623